



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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December 3, 1985

TO: Loren Morton, Department of Health, Bureau of Water
Pollution Control

FROM: Pamela Grubaugh-Littig, Reclamation Engineer *pgl*

RE: Shaft Abandonment, Texasgulf, Cane Creek Mine,
ACT/019/005, Grand County, Utah

I reviewed the November 15, 1985 submittal from Texasgulf for the abandonment of two shafts. The onsite gravel areas are adequate (quantitatively and qualitatively) for the backfill of the two shafts.

There are several comments about the bond estimate:

1. The Division of Oil, Gas and Mining (DOGM) references the Rental Rate Blue Book and the Means Index (for labor and other costs). Most of the costs were comparable. However, the labor rates were low.

Operator Rate = \$29.85/hr
Truck Driver = \$23.45/hr
Foreman = \$32.85/hr
Truck Rental = \$66.88/hr (Terex 2366-25T)

2. The cement sack requirements were low. Assuming 2/3 cf/sack of cement:

Shaft #1 - 38,013 cf (22 feet diameter x 100 feet height) required or 57,019 sacks of cement (11 days required).

Shaft #2 - 1,256 cf or 1,903 sacks of cement (one day required).

3. The cost per cubic yard (cy) of gravel in place was changed to \$3.46/cy vs \$2.98/cy (change in labor rates).

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4. Several arithmetic errors were corrected.

5. Revised totals for the shafts are:

Shaft #1 - Total for Removing Salt =	\$104,024.00
Total Cost for Gravel =	\$102,555.00
Total Cementing Costs =	\$344,611.00
Gravel Refill =	\$ 9,255.00
Total Cost for Plugging Shaft #1 =	<u>\$560,445.00</u>
Shaft #2 - Total Cost for Gravel =	\$ 6,107.00
Total Cementing Costs =	\$15,087.00
Gravel Refill =	\$ 412.00
	<u>\$21,606.00</u>

6. The existing cement cover should be shown for Shaft #2 on the exhibit.

If you have any questions, please let me know.

btb

cc: Lowell Braxton
John Whitehead
9075R-19 & 20